Model MS2001L

Continuous LPR Corrosion Meter

The MS2001L is a microprocessor-based, field-mountable corrosion rate meter. This versatile instrument measures the instantaneous corrosion rate and electrochemical current between the electrodes of any standard 2-electrode linear polarization resistance (LPR) probe. Corrosion rate is displayed on the LCD display.

Corrosion rate measurements are made using the linear polarization resistance technique. The instrument measures the current required to polarize the electrodes of a probe to a known potential. From the polarization potential and the measured current, polarization resistance can be calculated. Then, using Faraday's law, instantaneous corrosion rate is calculated from polarization resistance.

Alloy multipliers for mild steel, copper, brass, and lead are incorporated into the instrument. The multiplier is selected using a switch on the front panel of the instrument.

The MS2001L also offers a high precision zero resistance ammeter (ZRA) for measuring the electrochemical current between electrodes. This function may be used to measure the galvanic current between electrodes of dissimilar alloys.

The instrument is housed in a NEMA-4X enclosure, making the MS2001L suitable for use in almost any indoor or outdoor environment.

Technical Specifications

Model
MS2001L - Continuous LPR Corrosion Meter (Ordering # IN2001L)

Physical Data

Instrument Weight:	1.72 lb. (0.78 Kg)
Total Weight w/ Accessories:	2.93 lb. (1.33 Kg)
Instrument Dimensions:	5.91”H x 5.91”W x 3.57”D (15cm x 15cm x 9.1cm)
Case Specifications:	NEMA-4X, IP66
Mounting Dimensions:	4.72”H x 6.55”W (12cm x 16.7cm) Bolt Pattern 0.188” (0.48 cm) Diameter Bolt Holes
Operating Temperature:	32° to 122°F (0° to 50°C)
Storage Temperature:	-4° to 158°F (-20° to 70°C)

Performance Data

Measurement Type:	2-Electrode LPR, Galvanic
Range:	2-Electrode: 0-40 mpy Galvanic: +/- 0-80 µA
Resolution:	2-Electrode: 0.02 mpy Galvanic: 0.04 µA
Cycle Time:	90 seconds

Electrical Data

Power Requirements:	100-240 VAC, 50/60 Hz
Maximum Probe Cable Distance:	2000 ft (609.6 m)

Special Features
- Alloy selector switch (Mild Steel, Copper, Brass, and Lead)
- 4-line, backlit LCD display
- Universal power supply input
- Continuous corrosion rate display (numeric value and 20-segment bar graph)

Accessory Items
10’ Probe Cable, Meter Prover, Operation Manual

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